DESCRIPTIONS OF FIVE NEW GENERA AND TWENTY-SIX NEW SPECIES OF ICHNEUMON-FLIES.

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The genera and species here treated are reared parasites of which, in many cases, names are desired for use in connection with papers on their economy that are to be published in the near future.

Family BRACONIDÆ.

APANTELES (APANTELES) FUMIFERANÆ, new species.

Female.—Length, 2.5 mm. Related to A. edwardsii Riley, from which it differs in the sides of the second dorsal plate being nearly parallel and shorter than the same plate is long down the middle; in the reddish-stramineous femora, the hind pair of which is tipped with fuscous; in the hind tibiæ being reddish-stramineous except at base and apex; in the blackish stigma; in the comparatively shorter ovipositor; in the black tegulæ and in other less important particulars.

Male.—Sufficiently similar to the female to be readily associated therewith.

Type.—Cat. No. 14309, U.S.N.M.

Type-locality.—Montcalm, Quebec, Canada.

Specimens that emerged June 18, 1911, at Chicoutimi, Quebec, Canada, and June 20, 1911, at the type-locality, constituting the type and paratypes, were received by the Bureau of Entomology, United States Department of Agriculture, from Dr. C. Gordon Hewitt, who reports this species as a parasite of the spruce budworm *Tortrix fumiferana*.

APANTELES (APANTELES) PRODENIÆ, new species.

Female.—Length, 2 mm. Head apparently wider than long; black; antennæ mostly dark brown, palpi pale, legs mostly stramineous, all coxæ black, trochanters dark, hind tarsi and apex of hind tibiæ infuscated, tegulæ blackish; scutel dullish, sparsely punctured; propodeum with five or six areas, the areola almost quadrate; first abdom-

inal segment almost parallel sided, half again as long as wide at apex, geniculate, the apical two-thirds without a fovea, basally roughened and with a few scattered punctures; second plate nearly three times as wide at base as long down the middle, its apical margin arched; hypopygium extending a little beyond the pygidium, sheaths of the ovipositor about as long as the first dorsal plate; wings almost colorless, costa and stigma dark brown, radius, transverse cubitus and third abscissa of cubitus rather stramineous, most of other veins nearly colorless.

Male.—Essentially as in the female.

Type.—Cat. No. 14310, U.S.N.M.

Type-locality.—Bangalore, Mysore, India.

From larvæ of Prodenia littoralis, on authority of L. C. Coleman.

APANTELES (APANTELES) TARAGAMÆ, new species.

Female.—Length, 2 mm. Related to Apanteles tischeriæ Viereck, from which it can be distinguished by the first dorsal plate being hardly one and one-half times as long as wide at apex, its apical half roughened, without a fovea and nearly parallel sided; second plate at least nearly four times as wide at base as long down the middle; wings, including the stigma, almost entirely colorless, costa tinged with brown; sheaths of the ovipositor nearly as long as the abdomen.

Male.—Essentially as in the female; apical half of first dorsal plate with converging sides, second dorsal plate narrower at base than in

the female.

Type.—Cat. No. 14311, U.S.N.M.

Type-locality.—Bangalore, Mysore, India.

From larve of Taragama dorsalis, on authority of L. C. Coleman.

APANTELES (APANTELES) TISCHERIÆ, new species,

Female.—Length, 2 mm. Agrees with the original description of Apanteles prodeniæ Viereck, except as follows: Legs mostly black or blackish, scutel polished, apparently impunctate; first dorsal plate about one and one-half times as long as wide at apex, its sides arcuate, somewhat wider at apex than at base, geniculate, its apical two-thirds roughened and with a median fovea; second plate with its apical margin virtually straight, hypopygium hardly surpassing the pygidium.

Male.—Essentially as in the female.

Type.—Cat. No. 14312, U.S.N.M.

Type-locality.—Woodside, Delaware, August 9, 1905. Parasite of

Tischeria malifoliella. S. H. Darby, collector.

This is the same as the MS. species of Ashmead that has appeared in the literature on economic entomology, and occurs in Connecticut and very likely elsewhere along with its host.

APHIDIUS COLEMANI, new species.

Female.—Length, 2 mm. Related to Aphidius rosæ Haliday, from which it may be distinguished as follows: Mostly blackish; head uniformly blackish, clypeus, edge of malar space, and mouth stramineous; flagel 14-jointed; mesonotum black; notauli virtually wanting; scutel black, prothorax yellowish; propodeum black, with a diamond-shaped arcola and a petiolarea, the arcola adjoining four other areas; second, third, and fourth segments largely blackish, first segment partly brownish, apical half of abdomen mostly yellowish, sheaths pale.

Male.—Flagel 17-jointed; abdomen almost entirely black, the

first segment brownish; otherwise essentially as in the female.

Type.—Cat. No. 14313, U.S.N.M.

Type-locality.—Bangalore, Mysore, India.

From Aphis sp. on tobacco, on authority of L. C. Coleman.

A study of the male paratopotypes shows that the flagel may be 16 or 17 jointed with the end joint in the 16-jointed specimens nearly as long as the preceding joint or decidedly longer.

Named for Mr. L. C. Coleman.

METEORUS ARCTIICIDA, new species.

Female.—Length, 4 mm. Related to Meteorus obfuscatus Necs, from which it differs chiefly as follows: Antennæ 31-jointed, all joints of the flagel distinctly longer than wide, brownish; ocelli apparently a little nearer the eye margin than to each other; head brownish; occipital carina rather angulate in the middle and at most nearly twice as far from lateral ocelli as the latter are from each other; thorax mostly brownish-stramineous, prescutum separated from the parasides by sculpture rather than impressed notauli, prescutum with a median longitudinal line of sculpture; stigma dark throughout; propodeum almost uniformly reticulate throughout, concave posteriorly; apical third of hind tibiæ and their tarsi more or less infuscated; stigma almost entirely dark, fuscous; fossæ of first segment poorly developed, post petiole striate throughout, petiole stramineous, post petiole rather brownish; second and third segments mostly rather stramineous, rest of dorsum of abdomen blackish down the middle, stramineous laterally; exserted portion of ovipositor nearly as long as the abdomen.

Male.—Essentially as in the female. Type.—Cat. No. 14314, U.S.N.M.

Type-locality.—Agumbi, Mysore, India, from Arctiid larvæ, September 14, 1910, on authority of L. C. Coleman.

METEORUS TRACHYNOTUS, new species.

Female.—Length, 4.5 mm. Related to Meteorus incompletus Provancher, from which it may be distinguished by the antenne, which are at least as long as the body, by all the joints of the flagel being longer than wide; by the almost entirely yellowish head; by the nonprominent prescutum; by the coarse carinæ of the propodeum; by the poorly defined basal area of the dorsal aspect of the propodeum; by the poorly defined petiolarea; by the channeled posterior face of the propodeum, which channel is more or less bounded by trenchant carinæ; by the prothorax being stramineous; by the mesosternum and somewhat more than the lower half of the mesopleuræ being pale brown; by the hind tibiæ and tarsi being more or less infuscated; by the second and third dorsal segments of the abdomen being pale to dark brown; by the sides and venter of apical half of abdomen being brownish; and by the exserted portion of the ovipositor being somewhat shorter than the abdomen.

Male.—Closely resembles the female; its propodeum hardly channeled; its second dorsal segment yellowish.

Type.—Cat. No. 14315, U.S.N.M.

Type-locality.—Maniwaki, Quebec, Canada.

Type and paratypes reared June 20 and July 3, 1911, in connection with rearings of *Tortrix fumiferana*. Received by the Bureau of Entomology, United States Department of Agriculture, from Dr. C. Gordon Hewitt. In two female paratopotypes the mesothorax is almost entirely black or blackish; in one the prothorax is mostly blackish.

MICROBRACON HYSLOPI, new species.

Female.—Length, 3.5 mm. Related to Microbracon cooki (Ashmead), from which it differs in the almost entirely black head; in the dorsulum, prothorax, and scutel being more or less reddish; in the costa of the stigma being stramineous, in the furrow of the mesopleuræ being more distinct and reddish; in the legs being blackish excepting the fore femora and tibiæ and part of mid and hind tibiæ, which are more or less stramineous; in the better defined triangular area of the first segment, which is black and flanked basally by reddish pieces; in the color pattern of the rest of the abdomen, which mimics the pattern in M. nigridorsum (Ashmead) and consists in the second segment being almost entirely reddish, in the disks of the third, fourth, and fifth segments being black, bounded laterally by reddish, rest of the abdomen above mostly reddish; in the second segment being rather rugose in the middle, elsewhere as the third, fourth, and fifth segments, delicately sculptured, rather pebbled, but still polished, and in the second suture being more distinct; ovipositor approximately as long as the abdomen.

Type.—Cat. No. 14316, U.S.N.M.

Type-locality.—Pullman, Washington, reared August 10, 1909, from Etiella zinckenella by J. A. Hyslop under Webster No. 5935, Bureau of Entomology, United States Department of Agriculture.

Named for Mr. J. A. Hyslop.

MICROBRACON PSILOCORSI, new species

Female.—Length, 2.5 mm; ovipositer, 1 mm. May serve as typical of a species group having the first dorsal segment trepezoidal with its sides about as long as it is wide at apex, its base nearly twothirds as wide as the apex, its spiracles on a projection which extends beyond the outside line of the segment and with a partially circumscribed basal medial area on the second dorsal segment defined by two oblique furrows converging from the base to a little beyond the middle, but not uniting; the tegument is mostly smooth and polished, otherwise essentially as in Microbracon mellitor (Say); head mostly stramineous, mandibles mostly yellow, antennæ dark brown to blackish; thorax and legs to a large extent stramineous, dorsum of thorax infuscated, the parapsidal furrows and their borders as well as the scutel rather stramineous; apical tarsal joints, apex of hind tibie as well as all of hind tarsi more or less infuscated, tegulæ stramineous, wings brownish; propodeum translucent, infuscated; abdomen stramineous ventrally, dorsally fuscous bordered with stramineous.

Male.—Length, 2 mm. Essentially as in the female, but considerably darker, the thorax mostly infuscated as are also the hind

tibiæ.

Type.—Cat. No. 14317, U.S.N.M. Type-locality.—Cuero, Texas.

Bred by M. M. High from *Psilocorsis* November 12, 1910. Received from Dr. F. H. Chittenden, Bureau of Entomology, United States Department of Agriculture.

One male shows an extra pair of furrows on the second dorsal segment near the lateral margin or about halfway between the median furrows and the outer edges of the segment.

APANTELES (PROTAPANTELES) COLEMANI, new species.

Female.—Length, 2 mm. Related to Protapanteles creatonoti Viercek, from the original description of which it differs as follows: Scape black, flagel blackish, labrum blackish; scutel dullish, apparently finely sculptured; tegulæ dark brown; radius, transverse cubitus, and third abscissa of cubitus stramineous, rest of veins almost colorless; coxæ black, proximal trochanters dark, middle femora dark at base, hind femora with the upper edge dark; propodeum mostly smooth and shining; first dorsal plate apparently one and one-half times as long as wide at base, black throughout, mostly sculptureless

and polished, indefinitely sculptured at apex; second-plate apparently one and one-half times as long down the middle as wide at base, black throughout; third segment blackish throughout, part of venter stramineous, membranous portion of dorsum entirely blackish.

Type.—Cat. No. 14318, U.S.N.M.

Type-locality.—Vegati, Mysore, India, September 12, 1909, from larvæ of Orgyia postica, on authority of L. C. Coleman.

Named for Mr. L. C. Coleman.

APANTELES (PROTAPANTELES) CREATONOTI, new species.

Female.—Length, 2 mm. Black, shining; scape testaceous, flagel brownish, its joints near the apex distinctly longer than wide, labrum and palpi pale; head apparently wider than long; thorax not depressed, apparently as wide as thick dorsoventrally; scutel polished, almost impunctate; tegulæ stramineous; costa, stigma, radius, transverse cubitus, and third abscissa of cubitus, brownish, other veins mostly stramineous, wings transparent, with a dark tinge; legs, including coxæ and trochanters, almost completely stramineous, apical third of hind tibiæ and all of hind tarsi more or less brownish; propodeum indefinitely sculptured, without a median longitudinal carina; first dorsal plate apparently more than twice as long as wide at base and virtually twice as wide at base as at apex, punctured and black at apex, elsewhere mostly stramineous and polished; second plate apparently twice as wide at apex as at base, nearly as wide at base as long down the middle, polished, impunctate, testaceous to blackish; third dorsal segment apparently one and one-half times as long as the second, polished, impunctate, more or less stramineous laterally, dark down the middle; most of venter and membranous portion of abdomen stramineous; hypopygium extending a little beyond the pygidium, ovipositor a little exserted.

Male.—Essentially as in the female. Type.—Cat. No. 14319, U.S.N.M.

Type-locality.—Honalli, Mysore, India, July 10, 1910, from larvæ of Creatonotus albistriga, on authority of L. C. Coleman; two paratopotypes under date of September 6, 1910. Paratypes hale from Bangalore, from Arctiid larvæ, on authority of L. C. Coleman.

APANTELES (PROTAPANTELES) CUSHMANI, new species.

Male.—Length, 2 mm. Related to Apanteles (Protapanteles) pholisoræ Riley, from which it differs as follows: Scape black, tegulæ black, coxæ black; propodeum coarsely rugose; first segment a little more than one and one-half times as long as wide at base, its apical half coarsely sculptured; second segment not much shorter than the third; the second plate transverse, nearly oblong, its sides curved, lateral edge of the membranous portion of the second segment pale; third

segment black, indistinctly sculptured at base; rest of abdomen black or blackish; abdomen depressed. In having the head apparently wider than long; in the first segment being wider at apex than at base and in the second plate of the abdomen being as wide or a little narrower at base than long down the middle, it agrees with Apanteles (Protapanteles) pholisoræ Riley.

Type.—Cat. No. 14320, U.S.N.M.

Type-locality.—Vienna, Virginia; bred July 31, 1911, from cocoons on grass by R. A. Cushman under Quaintance No. 7067, Bureau of Entomology, United States Department of Agriculture.

Named for Mr. R. A. Cushman.

APANTELES (PROTAPANTELES) ELECTRÆ, new species.

Female.—Length, 2.5 mm. Related to Apanteles (Protapanteles) cushmani Viereck, from which, as originally described, it differs as follows: Hind femora blackish-brown; stigma black; propodeum polished at base; first segment hardly one and one-half times as long as wide at base, its apical third punctured; second segment approximately two-thirds as long as the third, its plate trapezoidal, not sculptured down the middle, and apically transversely impressed, its sides straight anteriorly; third segment not at all sculptured at base; abdomen compressed and black or blackish throughout.

Male.—Essentially as in the female. Type.—Cat. No. 14321, U.S.N.M.

Type-locality.—San Diego, California; bred from Hemileuca electra, May 20, 1911.

APANTELES (PROTAPANTELES) PAPILIONIS, new species.

Female.—Length, 2 mm. Related to Protapanteles creatonoti Viereck, from the original description of which it differs as follows: Propodeum almost without sculpture, mostly smooth and polished; first dorsal plate apparently twice as long as wide at base, its basal three-fourths parallel sided or nearly, indistinctly punctured and stramineous at apex; second plate apparently four times as wide at apex as at base, apparently twice as long down the middle as wide at base, stramineous; third segment hardly longer than the second; hypopygium shorter than the pygidium.

Male.—Essentially as in the female, but with the second plate

mostly dark.

Type.—Cat. No. 14322, U.S.N.M.

Type-locality.—Mysore, India, June 29, 1909, from larvæ of Papilio polytes, on authority of L. C. Coleman.

Paratypes hale from Bangalore, from larvæ of Papilio demoleus, on authority of L. C. Coleman.

APANTELES (PROTAPANTELES) STAUROPI, new species.

Female.—Length, 2 mm. Head apparently wider than long; black, antennæ brownish, palpi pale; pleuræ not separated from the mesosternum by a carinate fold; scutel shining, sparsely punctured; tegulæ blackish, wings with a dark cast, stigma and veins more or less brownish, legs mostly stramineous, coxæ black; propodeum roughened, with a more or less distinct median longitudinal carina; first dorsal plate appearing shorter than wide at apex, wider at apex than at base; its apical half mostly punctured, its basal half mostly impunctate; second plate transversely oblong, apparently two and a half times as wide at base as long down the middle, parallel sided, mostly smooth and not sculptured, with indefinite sculpture and a median welt; third dorsal plate not at all sculptured, a little longer than the second and like the latter with its lateral margins yellowish; hypopygium not surpassing the pygidium and ovipositor scarcely exserted.

Type.—Cat. No. 14323, U.S.N.M.

Type-locality.—Bangalore, Mysore, India, from larvæ of Stauropus alternus, on authority of L. C. Coleman.

As evidenced by one paratopotype, the sculpture of the first and second segments have a tendency to become totally effaced and the lateral edges of the second and third segments to become dark.

APANTELES (PSEUDAPANTELES) SESIÆ, new species.

Female.—Length, 3 mm. Related to Apanteles (Pseudapanteles) consimilis Viereck, from the original description of which it differs as follows: Membranous portion of second dorsal segment blackish, hind coxe basally black, costa virtually concolorous with the stigma, all veins of fore wings brownish stramineous; propodeum mostly smooth and polished, sparsely punctured, roughened along the median carina, its lateral hind angles striate; first dorsal plate with its sides converging toward the apex, apparently wider at base than at apex, its length obviously more than twice its width at apex, the apical half with a median longitudinal furrow at base, the basal half finely sculptured and punctate, the apical half rather finely, indistinctly rugoso-punctate; second plate at most nearly three times as wide as long down the middle, the latter length about two-thirds its width at base, smooth and shining down the middle, roughened at base, elsewhere dullish and punctured; third segment hardly twice as wide at base as long down the middle, smooth and shining, with scattered indefinite pit-like impressions.

Male.—Essentially as in the female. Type.—Cat. No. 14324, U.S.N.M.

Type-locality.—Vienna, Virginia, May 20, 31, 1911, parasite of Sesia scitula, on authority of R. A. Cushman, who reared the species

under Quaintance No. 7128, Bureau of Entomology, United States Dept. Agriculture.

One female paratopotype differs in being but 2 mm. long and in

being less developed, especially in sculpture.

Family ICHNEUMONIDÆ.

AENOPLEGIMORPHA new genus.

Related to Aenoplex (Foerster) Ashmead, from which it may be distinguished by the bidenticulate anterior edge of the clypeus and by the petiolate abdomen, the first segment being somewhat more than three times as long as wide at apex, with prominently elevated spiracles and possessed of two dorsal, parallel, longitudinal carinæ and by the prominent thyridia at the base of the second segment. Has the appearance of a Phygadeuonine with an open, Hemiteline areolet.

Type.—Aenoplegimorpha phytonomi, new species.

AENOPLEGIMORPHA PHYTONOMI, new species.

Male.—Length, 4.5 mm. Black and shining; face sparsely, indistinctly punctured, clypeus almost impunctate; flagel 20-jointed; region of malar line sculptured; mandibles black throughout, palpi blackish; notauli extending approximately one-fourth the distance from the anterior to the posterior margin; dorsulum indistinctly punctured; tegulæ blackish, fore and midcoxæ blackish at base, becoming stramineous apically; distal trochanters, femora, tibie, and metatarsi of fore and midlegs more or less stramineous; rest of tarsi infuscated, as are the apical half of hind femora and base and apex of hind tibiæ; rest of hind femora reddish, remainder of hind tibiæ stramineous, hind coxæ entirely black; stigma blackish, whitish at base; propodeum distinctly areolated, the areas before the apical transverse carina smooth and polished, the areas beyond sculptured; second segment black and striate except apical fifth and the thyridia, which are rather smooth and reddish; third segment virtually sculptureless, reddish; fourth segment reddish at base; rest of dorsum of abdomen black.

Type.—Cat. No. 14325, U.S.N.M.

Type-locality.—Hoytsville, Utah. Reared from Phytonomus murinus, September 4, 1911, by T. H. Parks under Webster No. 5609, Bureau of Entomology, United States Department of Agriculture.

BRACHIXIPHOSOMA new genus.

Related to *Eiphosoma* Cresson, from which it differs chiefly in having the malar line shorter than the mandibles are wide at base and in the propodeum extending at least to the apex of the basal third of the hind coxe.

Type.—Eiphosoma pyralidis Ashmead.

CONOBLASTA FUMIFERANAE, new species.

Female.—Length, 7.5 mm. Very similar to Glypta erratica Cresson, from the original description of which it differs as follows: Front with a scoop-shaped process; mandibles black, clypeus pale only at apex, antennæ virtually black throughout; base of hind femora not blackish, hind tibiæ mostly black or blackish, pale beneath except at apex and near base, where they are blackish; propodeum almost devoid of carinæ, distinctly punctured, the apical transverse carina developed laterally, median longitudinal carina present only at base of propodeum.

Male.—Essentially as in the female; median longitudinal carinæ more or less completely developed, and the apical transverse carina

better defined.

Type.—Cat. No. 14326, U.S.N.M.

Type-locality.—Maniwaki, Quebec, Canada.

Received through the same channels as the *Apanteles* (*Apanteles*) fumiferanæ, described on another page of this paper. Paratypes examined came from Duncans and Esquimault, British Columbia, Canada.

PHYGADEUON (DIROPHANES) PLESIUS, new species.

Female.—Length, 8 mm. Compared with the original description of Phygadeuon (Bathymetis) spinicoxus Viereck, this species differs as follows: Clypeus rather separated from the face by a shallow furrow; distance between lateral ocelli if anything a little less than that between the same and the nearest eye margin; antennæ 30-jointed, second joint of flagel about as long as the first; basal area nearly crowded out, nearly three times as wide as long, areola six-sided, almost horse-hoof shaped; hind femora hardly three times as long as greatest width; second dorsal segment without a transverse impressed line in the middle and with gastrocoeli; carine of basal segment extending to the spiracles, but not beyond, black; face, excepting clypeus, which is black, and checks mostly reddish; first eight joints of antennæ brownish, the next five joints mostly or entirely yellowish, the remaining joints from brownish to blackish; mandibles stramineous tinged with reddish and tipped with black; coxe black tipped with brown, trochanters, mid and fore femora brown, more or less infuscated, hind femora black with reddish brown base and apex, tibiæ and tarsi more or less brownish, petiole and last three segments of abdomen more or less blackish.

Type.—Cat. No. 14327, U.S.N.M.

Type-locality.—Maniwaki, Quebec, Canada.

Received from the same source as Apanteles (Apanteles) fumiferanæ.

Bathymetis spinicoxus Viereck is probably also referable to this subgenus.

EPIURUS INNOMINATUS, new species.

Female.—Length, 7.5 mm. Compared with the original description of E. nigrifrons Viereck, this differs as follows: Ovipositor a little shorter than the abdomen; clypeus dark throughout; third, fourth, and fifth joints of hind tarsi dark, blackish; second, third, fourth, fifth, and sixth dorsal segments mostly reddish brown with an apical black border; pedicel and first joint of the flagel rather pale yellowish beneath, scape more or less brownish.

Type.—Cat. No. 14328, U.S.N.M.

Type-locality.—Esquimault, British Columbia, Canada.

Received through the same channels as Apanteles (Apanteles) fumiferanæ described on page 139 of this paper.

HYMENOEPIMECIS, new name.

Epimecis Brulle, 1846, not of Hubner, 1818.

HYMENOSYNECHES, new name.

Syneches Foerster, 1868, not of Walker, 1852.

MESOCHORUS DIVERSICOLOR, new species.

Female.—Length, 3.5 mm. Resembles M. perniciosus Viereck, from which it may be distinguished as follows: Furrow between face and malar space running parallel to the anterior edge of the clypeus, lower inner orbits rather striate; inner orbits with a whitish to brownish band extending along the eye margin, malar space and most of the mandibles whitish, clypeus brown to blackish, virtually impunctate except along its periphery; rest of the face blackish, as are the antennæ except the tip of the pedicel, which is yellowish; palpi stramineous, malar space whitish, rest of head mostly black or blackish; edges of prothorax more or less blackish, stigma not yellowish at base, are olet neither distinctly sessile nor distinctly petiolate; legs mostly stramineous, hind tibiæ with most of apical third fuscous; basal area longer than wide at base and triangular, costulæ joining the arcola a little below the middle; first dorsal segment blackish, the second brownish with pale thyridia, the third brownish with the apical third blackish, the fourth and following segments blackish.

Male.—Differs from the female chiefly in the face being all whitish below the antennæ, scape and pedicel yellowish beneath, prothorax mostly yellowish, basal area at least twice as wide at base as at apex, costulæ joining the areola a little above the middle.

Type.—Cat. No. 14329, U.S.N.M.

Type-locality.—Duncan, British Columbia, Canada.

Reared July 18, 25, 1911, at the type-locality in connection with rearings of *Tortrix fumiferana*. Received by the Bureau of Entomology, United States Department of Agriculture, from Dr. C. Gordon Hewitt

MICROTORIDEA, new genus.

Presumably related to *Microtorus* Foerster, from which it may be separated by the 10 penultimate joints of the flagel being longer than wide and by the marginal cell being longer than the stigma.

Type.—Microtoridea lissonota, new species.

MICROTORIDEA LISSONOTA, new species.

Female.—Length, 3 mm. Head black; face including clypeus distinctly pubescent, punctured, malar space smooth and polished, separated from the face by a furrow, rest of head polished; hind ocelli with a furrow between them, nearer the eye margin than to each other and apparently a little nearer to each other than to the occipital carina; malar line apparently a little longer than mandibles are wide at base; basal half of mandibles mostly yellowish, apical half mostly brownish; palpi pale; scape stramineous, pedicel and flagel more or less brownish, flagel 19-jointed; thorax black; pronotum with its transverse furrow almost crowded out in the middle by a rather broad process apparently extending back from the anterior edge; tubercles vellowish, propleuræ mostly polished; mesonotum polished, virtually bare, with distinct, converging notauli that extend nearly threefourths the distance from the anterior edge and are nearly three times as far apart anteriorly as posteriorly; upper anterior corner of mesopleuræ, tegulæ, and wing base yellowish; mesopleuræ partly sculptureless, partly punctured, completely separated from the mesosternum by the sinuous sternauli; veins brownish, stigma stramineous; legs almost entirely stramineous, apical joint of tarsi and claws brownish; propodeum with its basal area almost crowded out, transversely linear, the enternal area and spiracularea confluent, the areola hexagonal, wider anteriorly than posteriorly, its anterior edge straight, its posterior edge arched, the costula joining before the middle, areola between the costulæ nearly three times as wide as long down the middle, area dentipara and second pleural area separated, petiolarea nearly three-fourths the length of the propodeum, concave and at most two-thirds as wide as long down the middle, third lateral and angular areas confluent; abdomen polished, inconspicuously pubescent, first segment black with a poorly defined dorsal carina on each side that extends a little beyond the spiracles but not near them, petiole depressed, apparently twice as broad at base as thick dorsoventrally; postpetiole parallel sided, approximately twice as wide at apex as long, the spiracles at the anterior lateral angles; membranous portion of first segment and all of second segment mostly stramineous, following segments more or less testaceous; ovipositor approximately as long as the abdomen less the first segment.

Type.—Cat. No. 14330, U.S.N.M.

Type-locality.—Mysore, India, September 3, 1909, from Ophiusa melicerta, on authority of L. C. Coleman.

MONOBLASTUS CALIROÆ, new species.

Female.—Length, 5 mm. Related to Monoblastus punctifrons Davis, from the original description of which it differs as follows: Coxæ blackish or black basally, inclining to stramineous apically, trochanters stramineous, claws simple; wings blackish, stigma and veins blackish; front and clypeus rather indistinctly punctured, black.

Male.—Essentially as in the female, but with the scape pale beneath.

Type.—Cat. No. 14331, U.S.N.M.

Type-locality.—Vienna, Virginia, May 18, July 28, August 1, 1911, parasite of Caliroa (Eriocampoides) cerasi Linnæus, the pear slug, on authority of R. A. Cushman, who reared the specimens under Quaintance No. 7148, Bureau of Entomology, United States Department of Agriculture.

This species may prove to be Trematopygus fusculosus Davis.

NEOPIMPLOIDES, new genus.

Related to *Neopimpla* Ashmead, from which it may be distinguished by the slitlike spiracles of the propodeum and by the presence of an areolet; eyes distinctly emarginate above the middle.

Type.—Neopimploides syleptæ, new species.

NEOPIMPLOIDES SYLEPTÆ, new species.

Female.—Length, S.5 mm. Mostly smooth, shining, thinly pubescent and yellow, ornamented with black spots; antennæ 37-jointed, flagel dark brown above, reddish beneath and at tips, its first joint nearly as long as the second and third joints combined, scape and pedicel yellow beneath, dark brown above; face feebly punctured; labrum prominent, in outline almost an equilateral triangle, concave; ocelli inclosed by a quadrate black mark; dorsulum similar to the same in Theronia Holmgren, the prescutum- and parapsides each with a black mark; scutel completely bounded laterally by a trenchant carina, propodeum areolated, its basal area confluent with the arcola, the combined area broader at apex than at base, petiolarea wider than long, hexagonal, area superoexterna open externally, with a dull blackish spot, area dentipara completely inclosed, other areas all wanting; empodia virtually as long as the third joint of hind tarsi, claws falcate; alternate segments of the abdomen starting with the first with a black spot on each side; wings transparent with a smoky tinge.

Type.—Cat. No. 14332, U.S.N.M.

Type-locality.—Malebannur, Mysore, India. Reared from Sylepta derogata Fabricius, November 28, 1910, on authority of L. C. Coleman, who furnished the type.

PRISTOMERUS EUZOPHERÆ, new species.

Female.—Length, 7 mm. Head and thorax brownish to stramineous; face shining and punctured; thorax shining and punctured, parapsidal furrow represented only anteriorly by a shallow concavity; legs more or less stramineous, the hind tibiæ infuscated at base and on the apical half, hind tarsi blackish, tooth of hind femora represented by an angulation of the tegument the point of which is directed downward and backward; carinæ of the propodeum poorly developed, basal area forming an acute angled triangle, areola completely inclosed, more than twice as long as wide from costula to costula and punctured, basal area about twice as long as wide, parallel sided and striato-punctate; abdomen brownish, the membranous portion stramineous, first, second, and basal half of third dorsal segments blackish, petiolar carinæ not sharp, not extending to the spiracles, postpetiole and second dorsal segment finely striated; ovipositor approximately two-thirds as long as the abdomen.

Type.—Cat. No. 14333, U.S.N.M.

Type-locality.—Bangalore, Mysore, India. Reared from larvæ of Euzophera perticella, on authority of L. C. Coleman, who submitted the species for study.

ZAMESOCHORUS, new genus.

Apparently intermediate between *Plesiophthalmus* (Foerster) Brischke, *Astiphromma* (Foerster) Brischke, and *Mesochorus* Gravenhorst, though evidently nearest to the last-mentioned genus, from which it may be known by the malar space being almost wanting, the malar line being apparently as short or shorter than the first joint of the flagel is thick; by the malar space not being separated from the face by a furrow; by the distance between the lateral ocelli and the eye being less than the shortest diameter of the lateral ocelli; by the distance between the lateral ocelli being greater than the distance between them and the eye; by the interstitial nervulus and the obsolescent outer vein of the areolet, the latter with its lowerside approximately half the length of the upper edge, its other sides nearly equal in length. Otherwise essentially as in *Mesochorus* Gravenhorst.

Type.—Zamesochorus orientalis, new species.

ZAMESOCHORUS ORIENTALIS, new species.

Female.—Length, 3.5 mm. Head shining, stramineous, more or less darkened, the ocellar region blackish; face punctured, orbits striated below; antennæ brownish, flagel 33-jointed; prothorax stramineous, shining, pronotum with a median longitudinal carina parting its furrow; mesonotum shining, more or less stramineous, its prescutum and parapsides stained with fuscous; tegulæ and wing

bases vellowish, mesopleuræ blackish, shining and punctured; scutel stramineous; stigma and veins mostly brownish; legs stramineous, hind tibiæ with the apical fourth blackish; propodeum blackish, shining, finely punctured; basal area quadrangular, wider at base than at apex; areola hexagonal, almost diamond-shaped, a little wider at apex than at base, the costulæ joining it at its middle, petiolarea apparently a little longer than the areola and about twice as wide as the same, at least three times as wide at apex as at base; petiole but little longer than the postpetiole, stramineous at base. blackish beyond, gradually widened, sparsely sculptured; postpetiole blackish, longitudinally striated, a little narrower at base than at apex, distance between the spiracles approximately half the distance between them and apex; second segment proportionally similar to the postpetiole, with a triangular blackish area on each side, the shortest side of the triangle being at the base of the segment, otherwise the second segment is yellowish, the gastrocoeli oval, at base, and stramineous; basal half of third segment yellowish; rest of abdomen infuscated stramineous; sheaths of the ovipositor a little longer than the second segment and stramineous; hypopygium exserted beyond the pygidium.

Type.—Cat. No. 14334, U.S.N.M.

Type-locality.—Mysore, India, September 3, 1909, from Ophiusa melicerta, on authority of L. C. Coleman.